

CGAGCACCCACAAGTAACTGTGTTGACTATTTACTGCTGTTTTTGCCTAGCACCCACACGA  
TGTTACAGGGGAAACGTTGGATACTTGTGTTGCCGTTGGCGCCCTGGTCGGCGCC  
TCCGTAAGGCAGCCGATTTTTCTGGCAGGGGAACCGTCAATGGACAGCCGGTTGG  
CAGCGGTTATTCCGGATATCCCCGTGGCGATGATGTTAGGTAGGTTACCACAACTTGC  
 TCGGAACCCAAGGGTTAAAGGGTAGAGCTGGCTAGATTTTCCAACACTGTATCATGTACC  
 TCCGTCTGTTTCATCGGGCAGTAGTAGCATGGGAGTGCTCGTCACAAGCCGTTGGGGGCA  
 AGGTTTCTGTTGTCTTGCCATGCGTGTATCGCCCGCTCCTGGTTCATGCTTATATGCGATC  
 TAGTGCCCCACGCGGATGCTCAATGCAATTGCCTTTTGCAGACAATCAATGGCTGCAC  
CCGAAGATCTGCCAGGCGAGAGGCAACCGGAGACACCCACGGCGGAAGCTGTAAA  
ACAGGCAGCGGCAAAAGCTTATCGATTACTCAAGCAGTTTACTGCGAAGGTGCGAC  
AGGAACTGAGAACGCCTACTACCACGTGAAGAAAGCGACAATGAAAGGCTTTGAC  
GTTGCAAAAAGACCAGTCGTATAAGGGCTACTTGGCCGTCAGGAAAGCCACAGCTAA  
GGGCCTGCAGAGCGCTGGCAAGAGCCTTGAGCTTAAAGAGTCGGCACCGACAGGC  
ACTACGACTGCGGCGCCGACTGAAAAAGTGCCCCCAGTGGCCCGTGATCAGGTGA  
AGTTCAACGTACTCGTAAGGAGCAAAATGACGTGCAGCAAACCGCAGAGATGTTGG  
CTGAGGAAATTCTTGAGGCTGGGCTTAAAGAAGGACGATGGAGAAGGACGGGGAAC  
GCCAGAAGCTGAAGTCAATTAAGAAAATCACTAAACGTCAAGTTCTTTATGACTGCTGT  
 ACACCACCACCCCTGGACTGCTTAAGACAGCTAACAAGCGTTGGATTTCAATATCCTA  
 CTTAAGGTATGTGGGGCGGATGTCGTGTACGGTGTGTATGGCGTTAAAAACGGCACAC  
 GGCATTAAATGCAGTGCAAGTATGAATTGTGCGCAGGATGACAACATCTGTTGCAAACAG  
 CTCTTGGGGGCGAACGAGAATGAGACCGTTGCATTGCGGTACGTGCATACGATGGCCCAT  
 TTTCCGGGTGCCAATAGTTGTGTGTGACATTTTCCGATGTCTGGGCTTTGTGTGCGTGC  
 GNNGGCTGCGAAGAGNATTAGATTTATTTCTTGCGANTGCNANNNTANTTTGTTGCATC  
 CGTTATGGTCATGAAAAAATTGCTAACGACACACATAAACGATGGAGCAAATT

Figure 1A

ATGTTACAGGGGAAACGTTGGATACTTGTGTTGCCGTTGGCGCCCTGGTCGGCGCCTCG  
 GTAAAGGCAGCCGATTTTTCTGGCAGGGGAACCGTCAATGGACAGCCGGTTGGCAGCGG  
 TTATTCCGGATATCCCCGTGGCGATGATGTTAGAGAATCAATGGCTGCACCCGAAGATCT  
 GCCAGGCGAGAGGCAACCGGAGACACCCACGGCGGAAGCTGTAAAACAGGCAGCGGCAA  
 AAGCTTATCGATTACTCAAGCAGTTTACTGCGAAGGTGCGACAGGAACTGAGAACGCCT  
 ACTACCACGTGAAGAAAGCGACAATGAAAGGCTTTGACGTTGCAAAAGACCAGTCGTATA  
 AGGGCTACTTGGCGTGCAGGAAAGCCACAGCTAAGGGCCTGCAGAGCGCTGGCAAGAGC  
 CTTGAGCTTAAAGAGTCGGCACCGACAGGCACTACGACTGCGGCGCCGACTGAAAAAGT  
 GCCCCCAGTGGCCCGTGATCAGGTGAAGTTCAACGTACTCGTAAGGAGCAAAATGACGT  
 GCAGCAAACCGCAGAGATGTTGGCTGAGGAAATTCTTGAGGCTGGGCTTAAAGAAGGACG  
 ATGGAGAAGGACGGGGAACGCCAGAAGCTGAAGTCAATTAA

Figure 1B

MFTGKRWLVVAVGALVGASVKAADFSGRGTVNGQPVGSGYSGYPRGDDVRESMAAPEDLP  
 GERQPETPTAEAVKQAAAKAYRLLKQFTAKVGQETENAYYHVKKATMKGFDVAKDQSYKG  
 YLA VRKATAKGLQSAGKSLELKESAPTGTTAAPTEKVPSPGPRSSEVQRTREQNDVQQT  
 A  
 EMLAEIELEAGLKKDDGEGRGTPAEVNV

Figure 1C

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NC      1 MFTGKRWILVVAVGALVGASVKAADFSGRGTVNGQPVGSGYSYPRGDDV 50
      ||..|: :|||||||..||:|:| | |.||..|: :|| | : : .
TG      1 MFAVKHCLLVAVGALVNVSVRAAEFS..GVVNQGPVDVPFSGKPLDERA 48

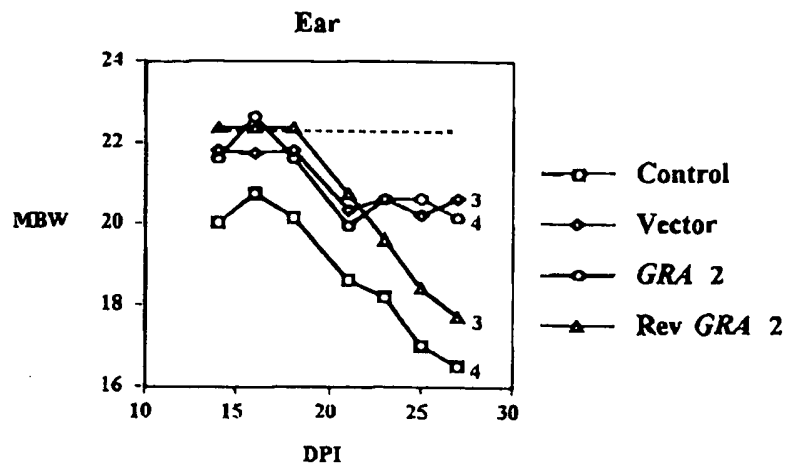
51 RESMAA.PEDLPGERQ..PETPTAEAVKQAAAKAYRLLKQFTAKVGQETE 97
   : : : . . . ||:| | | | |. |. |. : . . . |. . : | : . |. . . | : . . |
49 VGGKGEHTPPLPDERQQEPEEPVSQRASRVAEQLFKFLKFAENVGHHSE 98

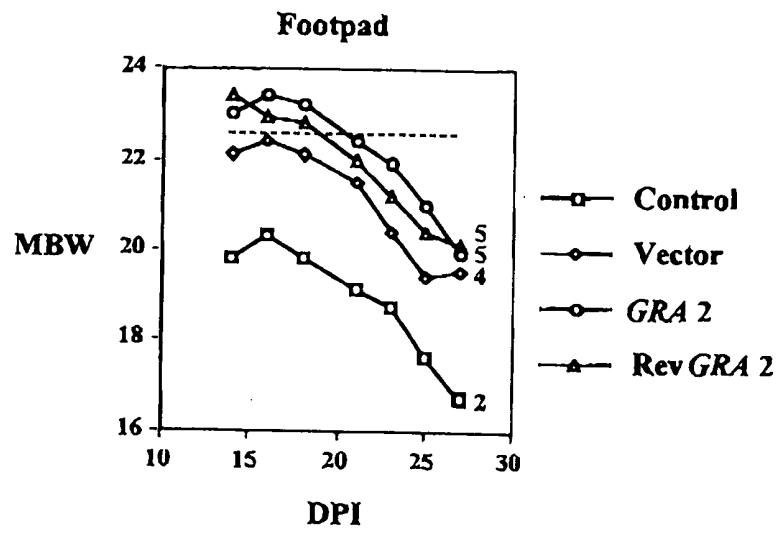
98 NAYYHVKKATMKGFDVAKDQSYKGYLAVRKATAKGLQSAGKSLELKEAP 147
   .|: .|. |. | |. | |. : : : . : . : |. : |. : . | |. |. | |. .
99 KAFKKAKVVAEKGFTAAKTHTVRGFKVAKEAAGRCMTVGKKLANVESDR 148

148 TGTTTAAPTEKVPPSGPRSGEVQRTTRKEQNDVQQTAEMLAEEILEAGLKK 197
   ..|||.||. .|. |. .|. |. . :. || |. : : . : .
149 STTTTQAPD...SPNGLAETEV.....PVEPQORAAHVVPDFSQ.... 186

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Figure 2

**Figure 3**

**Figure 4**

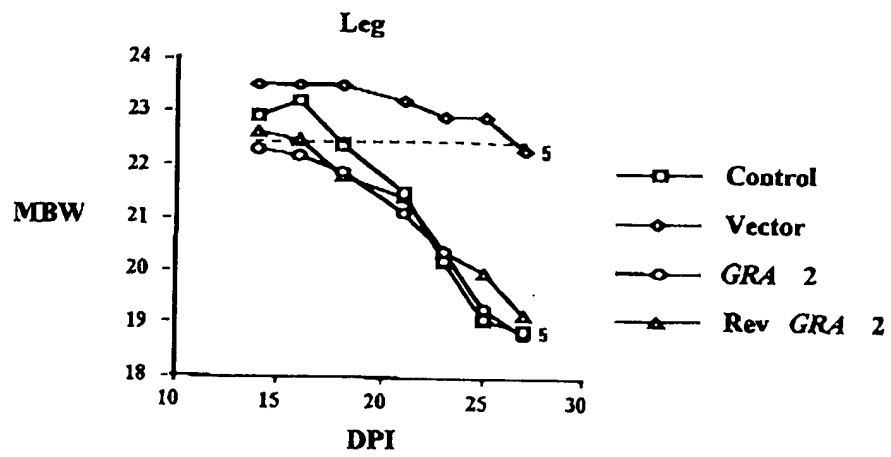
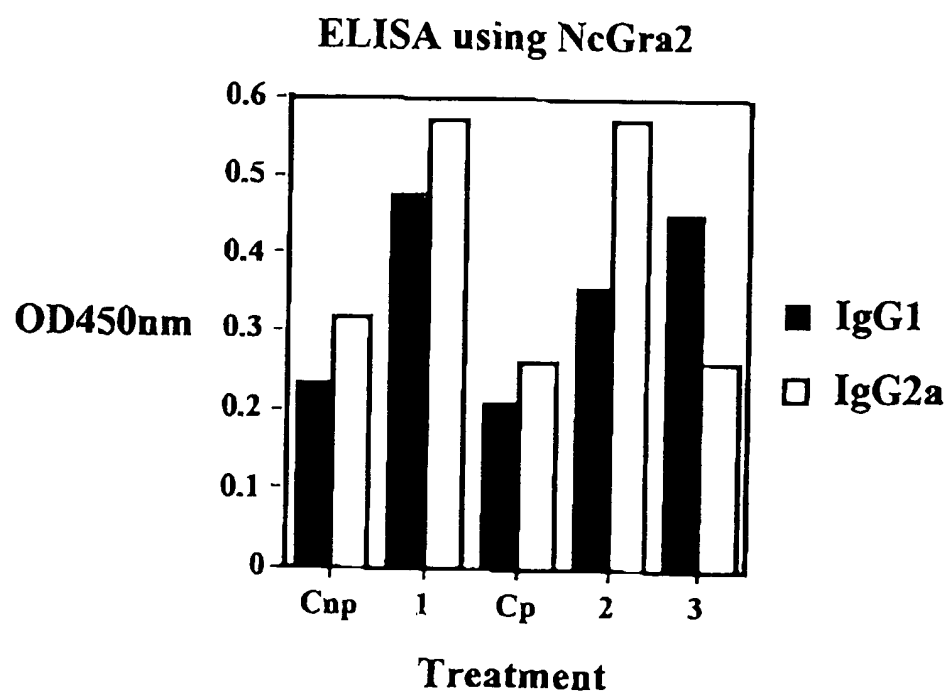


Figure 5

**Figure 6**

AATTCGGCACGAGTTTTTCGTCATTTCCCTTGTAAGCTGTGTCAAGCCGTTTTTAGAA  
 CCAATAAAGCCTATCTCTGCGTAGGCATTCTTCTTTTTTGCAGTAGAGGCTTCTATTT  
 CACTGAACCAATTGTGCCCTTCGCTACCGGACGGGTGCGTAGTTTGAGTCGTAACCGGG  
 GCTCAACCGTGGCAGTCCGCTGTTTTGCGGATACGCTGTCATTGTGGTCCTTTCGTTT  
 ATTTTCGTGATTTCCCTTCCCTTGTAAGTGAAGTCTCCTCGGCACTCTGCCTTTAGTTAACGT  
 TTAAAATTACAGCTTTTGTGTGCGGACTGCATTCCAATAGTCCAGGAAGAGATTTGTGC  
 ACGTGGCGGACCGAGCCAGCGACCTCGTGGAGGCTTGACGTGACGTGCAGCAGCAA  
 GAGGCAAGAGAAGGTGCGTGCGCCGCCACAGCCAAGGTCAACTTACGGTAGCATA  
 ATAGGACTCTTTTTGTGCTGTTGAGCGATTCCGAAACAACTCGAAAAGAAAGGACTT  
 CGTGGGAGGCCGTAACTGTCGTCGTCCTGGTGTGTTTTCCAAACCACTGCTCAACTAC  
 ATTTTACCCTTACCACCATCTGTTGCGCTCCGAGGTAGTGCAGAGGCACAGTCTC  
 CCCGTGCAACTATATTTGAAGGAAACATGGATCCTAAAGTGGAGAGTCAAACAAA  
TGTGCCATCTGGCGCAGAGGCAGAGCAGCCCAAGGCAGGAGAGGCACAAGCAA  
CTGTGGAGAACGGTAATACTTCAGCTCCGGATGCTCAGGTGAAGTCCCAAGCG  
TCCTCCGAAGATGTGGTAGCGCAGTCGTCAGAAAGACTTCAGCGGAAAGCTTCA  
GGCCAACTCAGGCATTGTGAGCTTCGGAGACTCTGCTGCTGGAAGTGGTGCGT  
TCAACAGTATGGACGTGCAGAACTTCTCCAGCGTTACGCAACGAGCAAGATGT  
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GCTGACCACCTCACCAGTCCCATGGTGCAGCCTTACGAGAAAGACGATCAGAA  
CCTACCCAATCCCTTTCATGTTTCGCTACCTGGGTACTCTCCGTCTCTCTGCAAG  
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GATTACCAATTACCCGCCTACGTGGATTCCGCACTGGGAACCCGATCCCAATTT  
CAAGCCACAGGCTTACAATTTCAACTGGGAGGAGAACGGCACATTTAGATGG  
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GGCATGTACAAGCAAGCCTACCCTTACACAGCGTATCCATACGGTGTTCGCGCG  
GTCTAGATAGCATAAACATTGTTTTCTCTTGGGATAAAAGCACAGGCAAAACAAG  
 GGATCGTTCCTCTTAGTCAACGACTGCTGAACAGCAGTCAGTCAGTTCAGGGCGTGG  
 CCTGACGGGTTTCATCAGCCCATTTTTTTGGTTCGAGTCACTGTTTGTTCGGGGATCT  
 GGCTGTGGCACCGAAGGCAATCTTGCTGCTGCTATAAAAATTCCTCATTCTGTTT  
 GTACGCTTACTAAGCTTCTGGCCTCGTCGTTTGGCTGTGGTCCATCCTCTACAACT  
 TATCTCCATCTCAACAAGGCCATAAAAAACCTGTTTTATTC

Figure 7

MDPKVESQTNVPSGAEEQPKAGEAQATVENGNTSAPDAQVKSQASSEDV  
VAQSSSEDFSGKLQANSIVSFGDSAAGSGAFNSMDVQNFLQRYATSKMFG  
VPPHFFQSRESLRVWGADHLTDPMVQPYEKDDQNLPNPFHVSLPGYSPSL  
CKYVLTKEKPPRDPLLGPETIYPPTWIPHWEPDPNFKPQAYNFNWEEN  
GTFQMERLPYAKAVFDPADGSAHGMKYQAYPYTAYPYGVPRV

**Figure 8A**

MDVQNFLQRYATSKMFGVPPHFFQSRESLRVWGADHLTDPMVQPYEKDDQ  
NLPNPFHVSLPGYSPSLCKYVLTKEKPPRDPLLGPETIYPPTWIPHWEPDPN  
FKPQAYNFNWEENGTFQMERLPYAKAVFDPADGSAHGMKYQAYPYTAYP  
YGVPRV

**Figure 8B**



TAAGCTGTGTCAAGCCGTTTTTGAACCAATAAAGCCTATCTCTGCGTAG  
 GCATTCTCTTTTTTGCAGTAGAGGCTTCTATTTCACTGAACCATTTGTGCC  
 TTCGCTACCGGACGGGTGCGTAGTTTGTAGTCGTAACCGGGGCTCAACCGT  
 GGCAGTCCGCTGTTTTGCGGATACGCTGTCATTGTGGTCCTTTGTTTCATT  
 TTCGTGATTTCCCTTCCCTTGTAGTGACTTCCTCGGCACTCTGCCTTTAGTT  
 AACGTTTAAAATTCAAGCTTTGTTGTGCGGACTGCATTCCAATAGTCCAGG  
 AAGAGATTTGTGCACGTGGCGGACCGAGCCAGCGACCTCGTGGAGGCTT  
 GACGTGACGTGCAGCAGCAAGAGGCAAGAGAAGGTGCGTGCGCCGCCCA  
 CAGCCAAGGTCAACTTACGGTAGCATAATAGGACTCTTTTTGTGCTGTTG  
 AGCGATTCCGAAACAACTCGAAAAGAAAGGACTTCGTGGGAGGCGCTAA  
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 CGCTTACCACCATCTGTTGCGCTCCGAGGTAGTGCAGAGGCACAGTCTC  
 CCCGTGCAACTATATTTGAAGGAAACATGGATCCTAAAGTGGAGAGTCA  
AACAAATGTGCCATCTGGCGCAGAGGCAGAGCAGCCCAAGCCAGGAG  
AGGCACAAGCAACTGTGGAGAACGGTAATACTTCAGCTCCGGATGCT  
CAGGTGAAGTCCCAAGCGTCTCCGAAGATGTGGTAGCGCAGTCGTC  
AGAAGACTTCAGCGGAAAGCTTCAGGCCAACTCAGGCATTGTGAGCT  
TCGGAGACTCTGCTGCTGGAAGTGGTTCGCTTCAACAGTATGGACGTG  
CAGAACTTTCTCCAGCGTTACGCAACGAGCAAGATGTTTGGAGTTCCG  
CCGCATTTCTTCCAAAGCAGAGAAAGCCTCCGAGTCTGGGGAGCTGA  
CCACCTCACCGATCCCATGGTGCAGCCTTACGAGAAAGACGATCAGA  
 GTAAGGTCATAGCACACCGTATTCTGGACAGAATCAGCGACGAGTACGAT  
 AGTCTTGCTGAACGATGGGAGTAGGATTTTTCTGCTCCTTGCATCGACG  
 GAGATATGACCCTCTGACGGACGCAGCAGTACCACCATTATCCACTGTCA  
 TGTACTTCACTGTATGTGACCTGTCTACATCAAGTCTTCCATATGGATGTT  
 TCGATCGTATCTAGCAAGGATGTAGTATGTTTGCTTAACCGCAAGCTAGG  
 GGGGGAGGGGGGATGTCGCTCGTCTGTTTGAATAGCAAGTGATGGTTATG  
 TAGATGTCTCTTTGCTATGCTGTTTTTACAGACCTACCCAATCCCTTTCA  
TGTTTCCGTACCTGGGTACTCTCCGTCTCTCTGCAAGTACGTTCTGAC  
CAAGGGCGGAGAAGCCTCCCCGCGATCCCCCTCCTCGGACCTGAGATTA  
CCATTTACCCGCTACGTGGATTCCCGCACTGGGAACCCGATCCCAATT  
TCAAGCCACAGGCTTACAATTTCAACTGTAAGTTGGCGTGCAACGCAGC  
 CGATCGTGTGGAGGCTTGATTTTTCTGCGGAAAGAGCGTGCATGCGATAC  
 AGCACTTTCCTAATTTTTATTGTGAACGCCACATGCCGAGGTGCGCTCCTC  
 CGTATGTAAAAGTCCCGGGTCAGCTTGAGGTAGTCGATATCAGTGAGACA  
 CACATACAAAGCTTAGGGACTCTCCTGTTTTCTGTTTTCCACAGTCTTTCA  
 TTCAAATACTTTATACAAATACTGAAAACCCCTCGGTAAACTCATAGAA  
 AAACCAAAGTATTTTTGCCTGTAACCAGCGTCTCTACTAGCTGCTGGTTTT  
 GTTTACCATCGTACTAGATGACGGTATATCCACGCAGAACTATGGTTTA  
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AGGAGAACGGCACATTTTCAAGTGGTGGTGGTGGTGGTGGTGGTGGTGGT  
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CTACCTTACACAGCGTATCCATACGGTGTTCGCGCGCTCTAGATAGC  
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 GGCCCTGACGGGTTTATCAGCCCATTTTTTTGGTTCGAGTCACTGTTTGTTC  
 CGGGGATCTGGCTGTGGCACCGAAGGCAATCTTGCCTTGCTGCCTATAAA  
 AATTCCTCATTCTGTTGTACGCTTACTAAGCTTCCTGGCCTCGTCGTTTG  
 GCTGTGGTCCATCCTCTACAACTTATCTCCATCCTCAACAAGGCCATAA  
 AAAACCTGTTTTATTCA

Figure 9

ATGGCTTTGTCTACGATGAACAAGCCCGGGCCGTTTAGACGGTTGTTGGGTTATGGTCTG  
CTGCTTGGCGCCGTTGTGCTCGAAGCGGCATTTGACCTCAGCGCTCCTGCGGAAGCTGTG  
GCGCTCCGAAGACTAGACCAAAAGGAACTGTCCAGGCTTTAGTGGAACAGCACAGGTTT  
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GCAGAAGAGAGAGGACTTCGTGCGGTACCCCGAGCGTGATGAAGATCGCACTGACGACCAG  
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CAGCTTTTGAAGCAGAGACGGAAAGAAAATGAAGAGAGGAACCGCGTGAAGCGAAACAGC  
GATGACGTCATGGCGGAGCTCAAGCAGAAACTCGCGGCCCGCAAGAAGGCAATGTAG

**Figure 10**

MALSTMNKPFPFRLLGYGLLLGAVVLEAAFDLSAPAEAVARRLDQKET  
VQALVEQHRFSNDYDQAEYRRRRQELGSQTPEEIEEAKRKYRKQVLKEQ  
QEDELKKKTDVIEELKKTAEERGLRRYPEDEDRTDDQQMDFETRQRE  
LRNMDSATKAQLLKQRRKENEERNRVKRNSDDVMAELKQKLAARKKAM

**Figure 11A**

MALSTMNKPFPFRLLGYGLLLGAVVLEAAFDLSAPAEAVARRLDQKET  
VQALVEQHRFSNDYDQEA

**Figure 11B**

ALSTMNKPFPFRLLGYGLLLGAVVLEAAFDLSAPAEAVARRLDQKET  
VQALVEQHRFSNDYDQAEYRRRRQELGSQTPEEIEEAKRKYRKQVLKEQ  
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LRN

**Figure 11C**

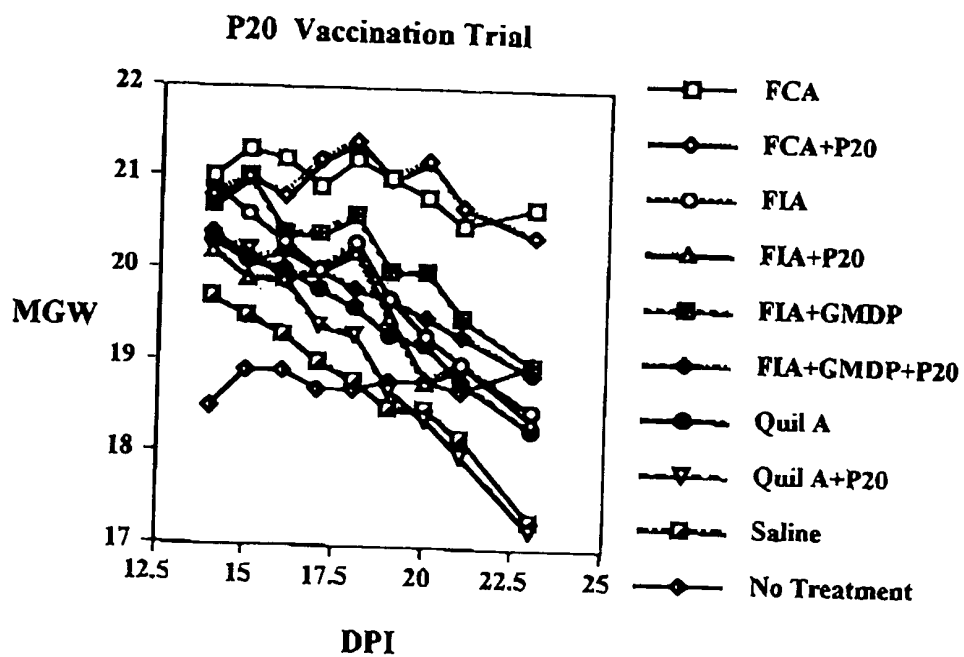
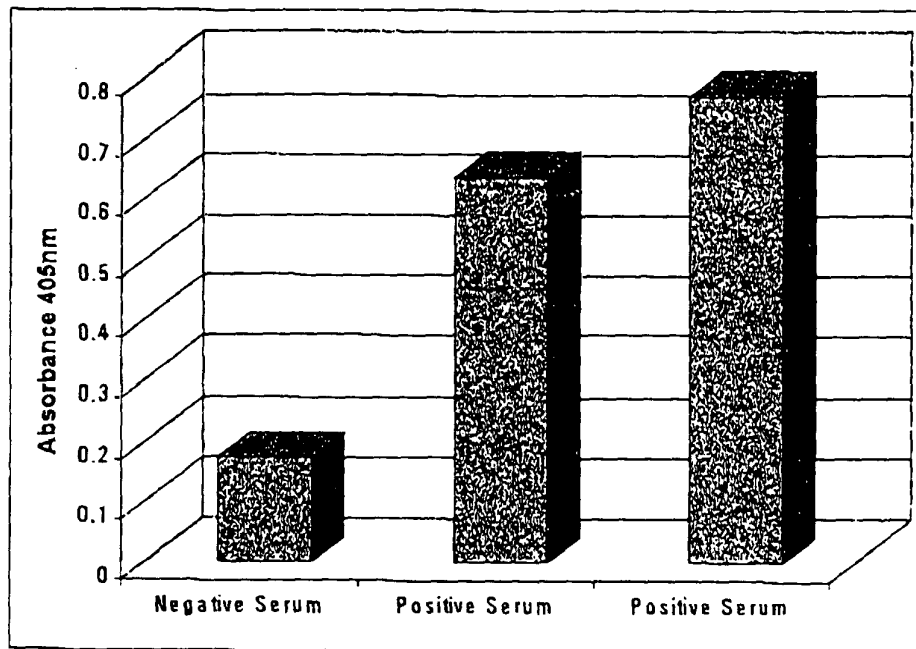


Figure 12

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Figure 13

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